

Preliminary archaeological observations at Ty Coch locks, Cwmbran, 2016

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Summary:

In July 2016, the existence of an extensive deposit containing significant amounts of nineteenth-century domestic material was recorded during shallow excavations to create paths and a seating area beside Lower Brake Lock, Ty Coch, Monmouthshire. The finds suggest a continuous nearby occupation by people who could afford a modicum of decorated ceramics and other fashionable objects.

Introduction:

At Ty Coch, to the west of Cwmbran, Monmouthshire, the Monmouthshire and Brecon Canal runs approximately north-south (Figure 1). This stretch, which opened in 1796, has been derelict since its abandonment of the canal in 1954. The Monmouthshire, Brecon and Abergavenny Canal Trust has been working to restore the disused section of the canal from Cwmbran to Newport. The project has been regularly supported for more than a decade by teams of volunteers from the Waterway Recovery Group (WRG). It was while working as a volunteer on several WRG “canal camps” that the author noticed that the disturbed soils around the locks under restoration at Ty Coch (Figure 2) contained sherds of nineteenth century ceramics (for example Figure 3) as well as other artefacts (Mills 2014). The occurrence of this material echoed the author’s observations of similar scatters of domestic material while volunteering on both the Swansea Canal and the Stover Canal in Devon.

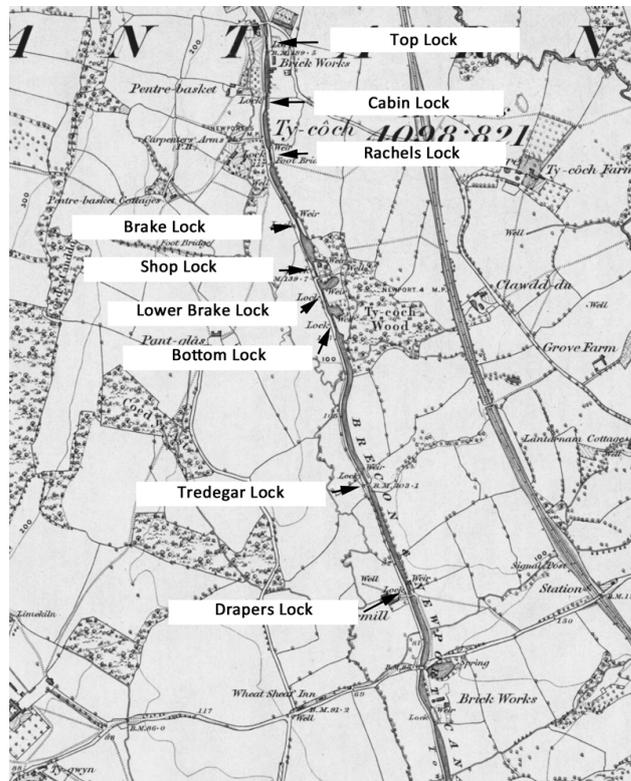


Figure 1: The Ty Coch staircase of locks, 1886.

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Because the restoration work unavoidably creates much disturbance of both banks of the canal, especially around the locks, it was not possible to suggest the origin of this material, which appeared to be overwhelmingly domestic rather than industrial. Indeed, most of the potsherds picked up by the author occurred in redeposited soils that had been excavated during restoration processes. From surface observations, the material spreads at least to the southern edge of Lower Brake Lock. Although the area around Brake Lock, Shop Lock, Lower Brake Lock and Ty Coch Lower Lock has produced most of what the author has observed, domestic pottery has also been found adjacent to other nearby locks, especially Tredegar Lock and Drapers Lock. Although a small building existed beside Drapers Lock, no occupation has been recorded near Tredegar Lock. This suggests that the sources of the material are not limited solely to activity immediately around Shop Lock.

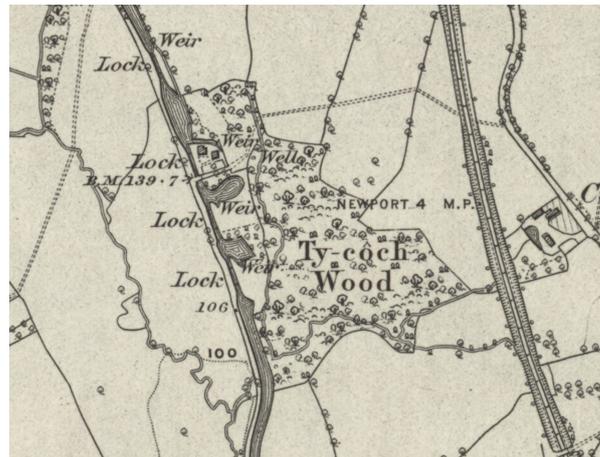


Figure 2: Shop Lock and Lower Brake Lock, Ty Coch, 1886

The gentle slope to the east of Lower Brake Lock is to become a picnic and recreation area. In July 2016, shallow excavations were carried out to create paths, and a deeper, circular trench dug to contain upright logs to form a picnic shelter. The opportunity was taken to treat these activities as informal semi-archaeological excavations, with the centre of the circular feature examined in more detail.

Previous work:

An excavation in 2013 revealed the plan of a building that once stood beside Shop Lock (see Figure 3, building A), and which included a saw-pit (Burchell ND). Although fragmentary domestic ceramics were found scattered across the building in unstratified deposits (Anon 2013), Burchell identified no evidence of domestic activity associated with this building, which was almost certainly the industrial workshop that gave the lock its name.

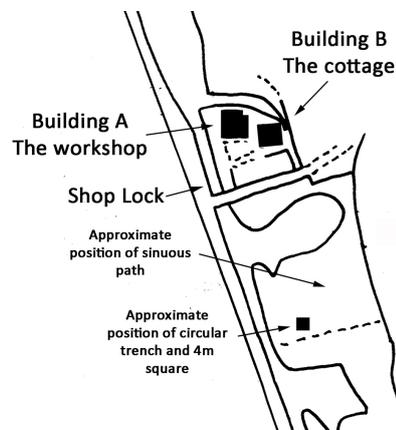


Figure 3: Sketch plan to show relative positions of buildings.

A limited excavation (Anon 2014) was carried out in 2014 on the site of a building to the east of the workshop, identified by locals as the lock-keeper's cottage (Figure 3, building B). The results of this investigation have yet

to be published, but if the building was indeed a “cottage” – i.e. a domestic rather than industrial building – this may explain the presence of some of the material. However it does not fully explain the extent of the material, which spreads at least 100m southwards, and its occurrence further afield.

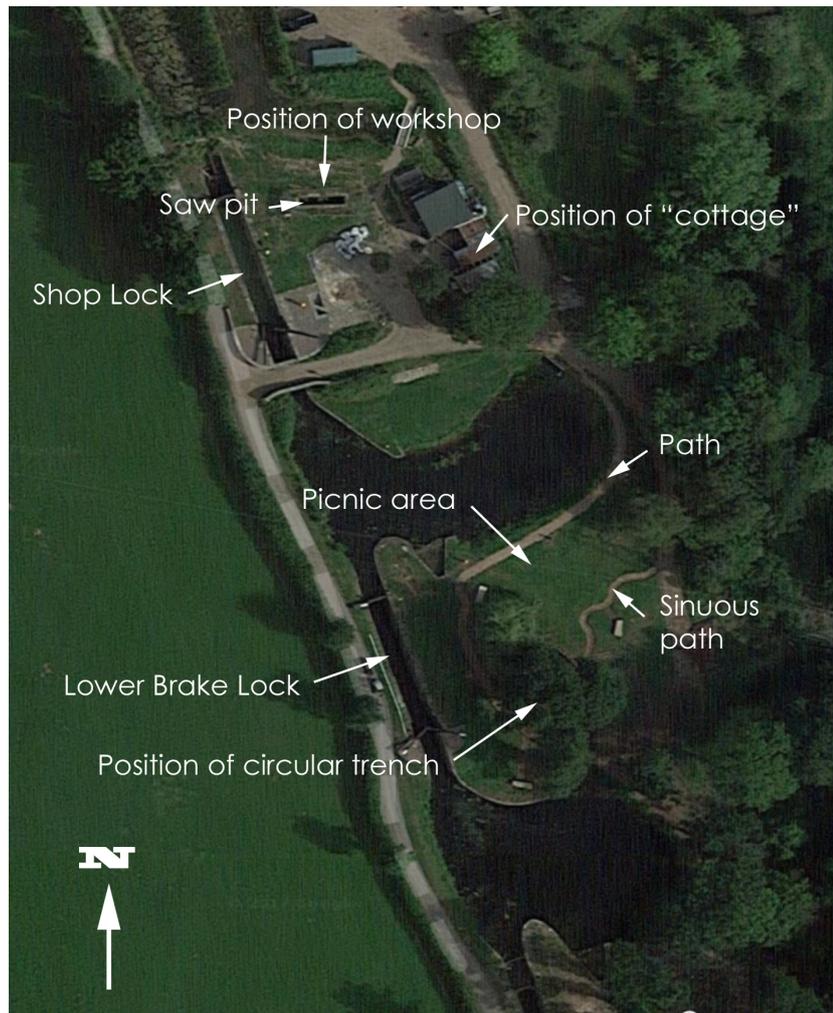


Figure 4: 2017 satellite image showing Lower Brake Lock.

The 2016 excavations:

In July 2016, four small-scale excavations were carried out as part of the creation of the picnic area:

1. A sinuous path, running roughly east-west towards the shelter (see Figures 3 and 4);
 - a. This path was excavated to approximately 10cm below the present surface in order to lay down a permeable weed-prevention membrane and wood chippings.
 - b. Artefacts were collected and treated as unstratified.
2. A circular trench (see Figures 3 and 4);
 - a. This trench was dug rapidly using mattocks and spades to a depth of between 0.5m and 1.0m.
 - b. Artefacts were collected, but given the speed of excavation it is likely that a proportion were missed.
3. A 4m square within the circular trench;
 - a. After removal of the surface turf this area was excavated with more care than the other trenches.
 - b. Artefacts were collected to a depth of approximately 10-15cm.
4. A small e-w trench to the north of the circular trench (Figure 7).
 - a. This trench was excavated to a depth of approx. 0.5m in order to confirm the line of a drain-pipe discovered in the circular trench.

A longer path was also constructed along the edge of the area, but this was only excavated to the base of the turf level. A number of artefacts were collected and treated as unstratified.

Methods

This project formed part of the activities of two Waterway Recovery Group canal camps. The principal tasks in the picnic area were to excavate several shallow trenches to allow the laying of a weed-proof membrane, which was then covered with wood chippings, to create paths. A deeper circular trench was to be dug to allow a series of logs to stand upright and form a shelter. The excavators were volunteers who had no previous archaeological knowledge or training. While the 4m square was excavated more carefully, generally the volunteers used mattocks, spades and shovels to create the pathways within the short time scale of the canal camps. They were shown how to identify and handle artefacts. Because of the generally rapid excavation process a number of artefacts were damaged and others, no doubt, missed. Because of time constraints, undecorated wares, building material and glass were only retained during the excavation of the 4m square trench.

Results:

Because of the semi-archaeological methods involved in this investigation, and the limited depth to which the excavation could proceed, the results can only be treated as a sample of the material present beside Lower Brake Lock. The only features found during the digging of the various trenches were two apparent drainage structures (see below).

Finds:

Table 1: The 4m square:

		NUMBER OF FRAGMENTS	PERCENTAGE ²	NOTES
Building materials	Slate	2		
	Tile	5		
	Drain pipe	3		
Iron	Tent pegs	2		
	Nails	2		
	Staple	1		
	Curtain ring	1		
Glass	Window glass	20		
	Bottle glass	75		
	Fine glass	9		
	Inkwells	2		
	Glass stoppers	3		
Animal bone etc.	Bone	2		
	Oyster shell	2		
Ceramics	Undecorated white/cream wares	292		
	Light blue wares	55	26	Figure 8
	Dark blue wares	40	19	Figure 9
	Mocha wares	3	1	
	Coloured/transfer printed wares	33	16	Figure 10
	Simple decorated	19	9	
	Fancy wares	9	4	
	Miniatures	3	1	Figure 11 1 jug, 2 cups, 2 plates
	Glazed earthenware	22	10	
	Part-glazed earthenware	20	9	
Unglazed earthenware	10	5	2 inkwells	
Clay smoking pipes		43		Figure 12 17 th Lancers O'Brien Real Irish G. Priest/Canton

² The percentages recorded in Tables 1-5 are of the total of decorated and fancy wares.

				Spooner/Tredegarr
Small finds	Clay marble			
	Doll limb			
	Bead			
	Buttons	2		
Coal		2		
Shale		1		
Slag		1		

Table 2: The sinuous path:

		NUMBER OF FRAGMENTS	PERCENTAGE	NOTES
Ceramics	Light blue wares	25	36	
	Dark blue wares	13	19	
	Coloured/transfer printed wares	14	20	
	Simple decorated	9	13	
	Fancy wares	2	3	
	Figurines	3	4	2 bases, 1 limb
	Glazed earthenware	2	3	
	Scalloped edge	1	1	
Clay smoking pipes		xx		
Small finds	Buttons	2		

Table 3: The circular trench:

		NUMBER OF FRAGMENTS	PERCENTAGE	NOTES
Iron	Bolt	1		
Ceramics	Light blue wares	30	32	Incl. tureen handle
	Dark blue wares	21	22	
	Coloured/transfer printed wares	18	19	
	Simple decorated	11	11	
	Fancy wares	4	4	Incl. applique horse
	Glazed earthenware	10	10	
Clay smoking pipes		20		
Small finds	Buttons	2		
	Slate pencil	1		
Animal bone etc.	Bone	1		Lower jaw
Slag		2		

Table 4: General:

		NUMBER OF FRAGMENTS	PERCENTAGE	NOTES
Iron	Nails	7		
	Horseshoe	1		
Cu	Nail	1		
Ceramics	Light blue wares	47	31	
	Dark blue wares	35	23	
	Coloured/transfer printed wares	22	15	
	Simple decorated	11	7	
	Fancy wares	9	6	Incl. applique horse
	Glazed earthenware	8	5	
	Part-glazed earthenware	7	5	
	Simple decorated	10	7	
	Miniature	1	1	
Mocha ware	1	1		
Clay smoking pipes		30		
Small finds	Buttons	1		
Animal bone etc.	Bone	2		Lower jaw

The drain pipe:

A terracotta pipe was encountered in the base of the circular trench (Figure 5). The pipe sections, which were stamped "R.P. Jones Newport", were butt-jointed (Figures 5 and 6), were 0.18m ($\pm 7''$) in diameter and 0.31m ($\pm 12''$) long. The interior of the pipe was dry and empty of silt. The pipeline sloped towards the south.

To confirm the line of the drain a 2.0m x 0.5m trench was dug E-W 2m to the north of the circular trench. In this trench, immediately to the west of the pipeline, a "French" drain constructed of a small stone-filled trench 0.35m wide also ran towards the south (Figure 7). It was not possible to ascertain at this point whether the ceramic drain was parallel to an/or later than the stone-filled drain, although they appeared to be converging. The stone-filled drain was not found in the circular trench to the south. Though land drainage would normally involve a number of parallel pipes, because of the limited scope of the excavation it was not possible at that time to identify any other nearby drainpipes.



Figure 5: Terracotta pipe exposed in circular trench.



Figure 6: Maker's stamp on terracotta pipe.



Figure 7: “French” drain (left) and terracotta drain (right).

Discussion:

The finds:

Below the general turf line on the slope beside Lower Brake Lock, a dark grey, gritty soil with specks of charcoal was found. Although the turf/topsoil contained a number of artefacts, it was in this darker soil beneath that the majority of finds listed in this report were found. Considering potential inaccuracies introduced by the semi-archaeological methodology involved in excavating the paths and circular trench it is interesting that the percentages of decorated ceramics found in the different areas are remarkably similar, with a range of values of between only 4 and 10 per cent (Table 5). This introduces a comfortable level of confidence into the results.

Table 5:

	4m square	Sinuous path	Circular trench	General	Mean	Range
Light blue decorated wares	26	36	32	31	31	10
Dark blue decorated wares	19	19	22	23	21	4
Transfer printed and other coloured wares	16	20	19	15	17	5

Dating:

Although the deposits have been affected by recent disturbance, most of the material found dates from the nineteenth century. The number of twentieth century and more recent objects was surprisingly small, given that the area was a designated picnic spot in the 1970s, and that 1980s material was found associated with the saw pit (Burchell ND, 37). However the presence of generally earlier light blue (Figure 8) as well as later dark blue (Figure 9) decorated ceramics suggests that there was a continuous rate of deposition throughout the century.

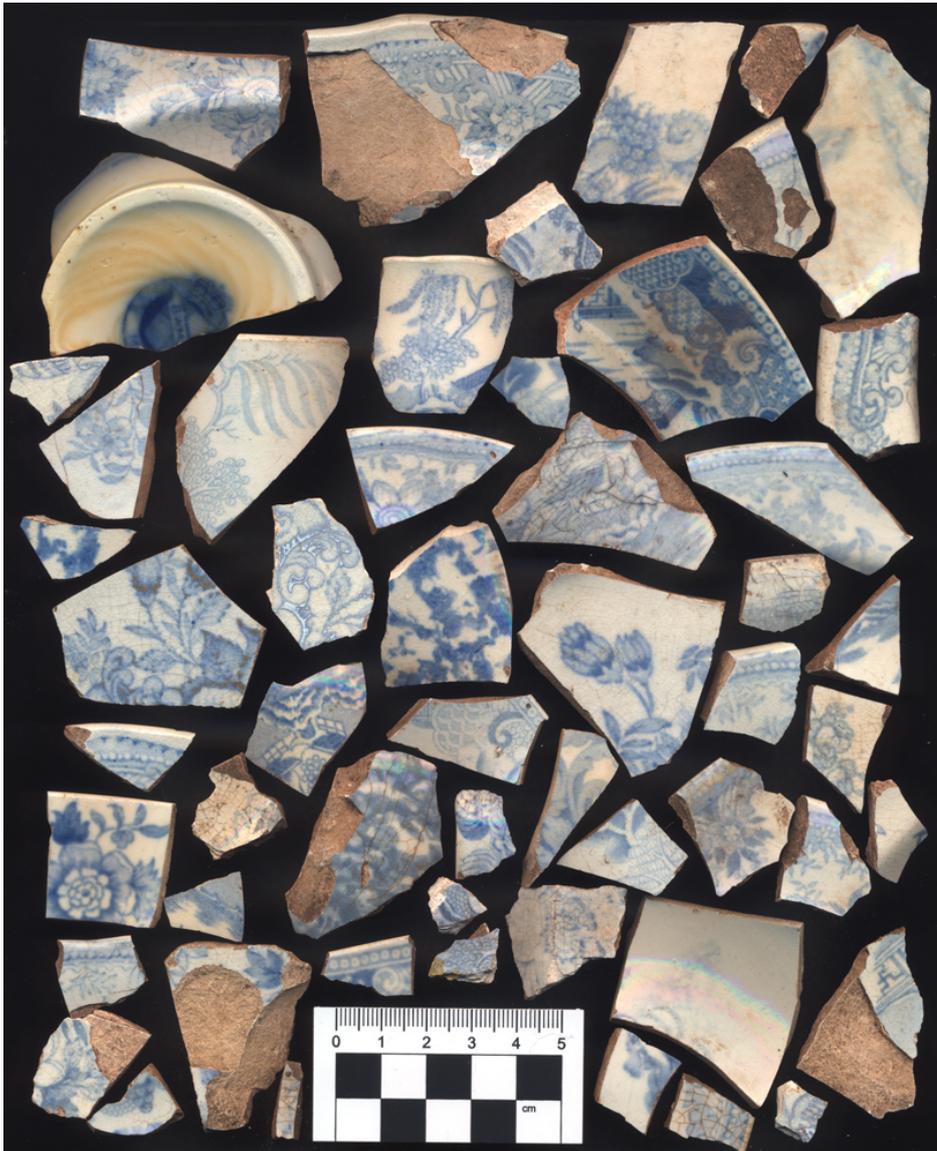


Figure 8: Light blue decorated ceramics from 4m square trench.



Figure 9: Dark blue decorated ceramics from 4m square trench.



9: Transfer-printed and coloured ceramics from 4m square trench.

Figure



Figure 10: Examples of clay tobacco smoking pipes from 4m square trench.

Miniatures:

The occurrence of miniature ceramics (Figure 11) is usually taken to indicate the presence of children, and this may be true in this case, though some archaeologists, including the author (Mills 2017, 431), have warned against this assumption, pointing to the popularity of these objects amongst adults.



Figure 11: Miniature vessels from 4m square trench.

The drain pipe:

The normal function of a butted drain pipe of this kind would be to improve the drainage of cultivated or waterlogged soils. That it may have replaced or enhanced an earlier, less sophisticated drain suggests that it served a significant purpose. However the area already slopes markedly to the south, and shows little sign of being waterlogged. A pipeline intended to allow the passage of running water would have normally been constructed of jointed and glazed pipes (such as that discovered during the 2014 excavation). While the stone-filled drain could be much earlier, "tile pipes" like that found were not introduced until well into the nineteenth century, and were not used after about 1890. The dating of the ceramic pipe to the nineteenth century means that the drainage post-dates the construction of the locks. R.P. Jones was listed as Portuguese Vice Consul for Newport in 1836 (Anon 1836) and occasional newspaper mentions indicate that an R.P. Jones was active in Newport in the late nineteenth century, though it has not been possible so far to link these with drainage pipe manufacture. The purpose of the drains remains unexplained.

Conclusions:

The large amount of material excavated beside Lower Brake Lock (as well as that scattered generally around all the Ty Coch locks) is difficult to explain without further investigation. The spread of domestic artefacts could have been the result of the use of "night soil" – the contents of nearby privies – as soil fertiliser and improver by the inhabitants of the adjacent cottage. The privy was often used as a convenient place in which to dispose of sweepings and ashes from coal fires. The deposit, which lies immediately below the turf line, is certainly ashy. However it contains occasional fragments of slag. These may have originated in the workshop, and perhaps the workshop had its own privy that was also used as a source of night soil. Another source of the spread of material may have been the canal itself, during the maintenance of which amounts of silt would perhaps have been shovelled onto the adjacent bank. Passing boats would no doubt have thrown rubbish overboard or onto the canal side, especially at locations that required a temporary mooring. However no freshwater molluscs or other indications of redeposited silt were found. No buildings appear on any maps other than the "cottage" and workshop.

The mix of artefacts suggests that those at its source(s) were not abjectly poor. The most common ceramics were plain, undecorated wares. However these were supplemented by "fancy" and transfer-printed ceramics, some fine glass and plenty of other decorated wares. This indicates the presence within households of at least some fairly fashionable and more expensive "china." The handle of a large light-blue decorated tureen was found in the circular trench. They smoked using decorated clay pipes, some of which had large bowls. It is likely that the material at Ty Coch, or at least the majority of it, originated in the cottage at Shop Lock, which was probably occupied for some 150 years. The material found further afield may have come from passing boats or from the cultivation of lock-side gardens.

Little work has been carried out on the archaeology of nineteenth-century canal-side life, with most attention understandably being given to the structures and features directly associated with waterways. The site at Ty Coch provides an opportunity to learn more about the material culture of those who worked on and lived beside this important industrial monument.

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